

REMARKS

Claim rejections under 35 USC 103

Claims 1, 11, and 31 are independent claims, from which the remaining pending claims ultimately depend. Claims 1, 6, 11, 12, 16, 21-22, and 29 have been rejected under 35 USC 103(a) as being unpatentable over Ulrich (5,753,417) in view of Tashiro (2004/0257506). Claims 3-5, 23-28, and 30 have been rejected under 35 USC 103(a) as being unpatentable over Ulrich in view of Tashiro, and further in view of Cauchi (2004/0101790). Claims 13-15 have been rejected under 35 USC 103(a) as being unpatentable over Ulrich in view of Tashiro, and further in view of Okoroanyanwu (6,589,713). Claims 31-36, 41-48, and 52 have been rejected under 35 USC 103(a) as being unpatentable over Ulrich in view of Tashiro, Okoroanyanwu, and/or Cauchi, and further in view of Makigaki (6,863,375). Claims 7-10, 17-20, 37-40, and 49-51 have been rejected under 35 USC 103(a) as being unpatentable over Ulrich, Tashiro, Okoroanyanwu, and/or Cauchi.

Applicant respectfully submits that at least as amended, claims 1, 11, and 31 are patentable over Ulrich in view of Tashiro, and optionally in further view of any other of the cited prior art references. As such, the remaining pending claims are patentable at least because they each depend from a patentable base independent claim. Applicant discusses claim 1 herein as representative of all the independent claims 1, 11, and 31 insofar as the present rejection is concerned. Claim 1 has been amended so that the depression is formed in “one or more of the first portion and the second portion,” instead of just in the first portion or the second portion, as previously claimed.

Furthermore, claim 1 has been amended so that the method is performed “such that *one of* (a), (b), and (c) is true. First, (a) recites that the second portion is exposed before the first portion is exposed, and baking the layer is achieved by performing a *first* post-exposure baking operation after the second portion has been exposed *and* by performing a *second* post-exposure

baking operation after the first portion of the layer has been exposed. This claim language tracks the embodiment disclosed in FIGs. 2A-2D of the patent application as filed. The second portion is exposed in FIG. 2A, followed by a first post-exposure baking operation in FIG. 2B, followed by the first portion being exposed in FIG. 2C, and finally followed by a second post-exposure baking operation in FIG. 2D.

Second, (b) recites that the second portion is exposed before the first portion is exposed, and baking the layer is achieved by performing a *single* post-exposure baking operation after the first and the second portions of the layer have been exposed. This claim language tracks the embodiment disclosed in FIGs. 4A-4C of the patent application as filed. The second portion is exposed in FIG. 4A, followed by the first portion being exposed in FIG. 4B, and finally followed by a single post-exposure baking operation in FIG. 4C.

Third, (c) recites that the second portion is exposed at least substantially at the same time at which the first portion is exposed, and baking the layer is achieved by performing a *single* post-exposure baking operation after the first and the second portions of the layer have been exposed. This claim language tracks the embodiment disclosed in FIGs. 3A-3B of the patent application as filed. The first and the second portions are exposed at the same time in FIG. 3A, followed by a single post-exposure baking operation in FIG. 3B.

Applicant respectfully submits that Ulrich in view of Tashiro, and optionally in further view of any other cited prior art references, does not suggest the claimed invention as has been amended. Ulrich in view of Tashiro suggest the following. As to exposing the two portions of the layer, Ulrich in view of Tashiro suggests exposing one portion before exposing another portion (see, e.g., Ulrich, col. 6, ll. 40-43 and col. 7, ll. 1-7 & 17-20). As to baking, Ulrich in view of Tashiro suggests that “ultraviolet irradiation, first bake, and second bake are *sequentially* performed” (Tashiro, para. [0206]). Thus, in the prior art in combination, two *separate* exposures (i.e., irradiations) are performed per Ulrich, and after these two exposures have been completed, *two* post-exposure bakes are performed per Tashiro *in that order*.

However, this approach that is suggested by the prior art in combination differs from (a), (b), and (c) as particularly recited in the independent claims. As to (a), a first post-exposure baking operation is performed *after* one portion has been exposed and a second post-exposure baking operation is performed *after* another portion has been exposed, where the second portion is exposed *before* the first portion is exposed. However, Tashiro suggests that the irradiation (i.e., the two exposures of Ulrich) and the two post-exposure bakes are performed *sequentially* in that order (i.e., such that irradiation/exposure is performed, *followed by* the post-exposure bakes being performed). This differs from the claimed invention, in which the post-exposure bakes are effectively interleaved with the exposures, with one exposure occurring, then one post-exposure bake occurring, then another exposure occurring, and finally another post-exposure bake occurring. As such, Ulrich in view of Tashiro, and optionally in further view of any other cited prior art references, does not suggest (a).

As to (b), a *single* post-exposure baking operation is performed after the portions have been exposed. However, Tashiro suggests that *two* post-exposure bakes be performed after the portions have been irradiated (i.e., the two exposures per Ulrich). This differs from the claimed invention, in which there is just *one* post-exposure bake. As such, Ulrich in view of Tashiro, and optionally in further view of any other cited prior art references, does not suggest (b).

As to (c), the second portion is exposed at substantially *the same time* as the first portion, and a *single* post-exposure baking operation is thereafter performed. However, Ulrich in view of Tashiro suggests that one exposure is performed followed by a second exposure being performed (per Ulrich), and after these exposures have been performed, *two* post-exposure bakes are performed (per Tashiro). This differs from the claimed invention in two ways: first, the claimed invention performs the exposures at the same time, whereas Ulrich in view of Tashiro does not; second, the invention performs a single post-exposure bake, whereas Ulrich in view of Tashiro does not. As such, Ulrich in view of Tashiro, and optionally in further view of any other cited prior art references, does not suggest (c).

For these reasons, Applicant respectfully submits that Ulrich in view of Tashiro, and optionally in further view of any other cited prior art references, does not render the claimed invention as has been amended *prima facie* obvious and unpatentable.

Conclusion

Applicants have made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Mike Dryja, Applicant's representative, at 425-427-5094, so that such issues may be resolved as expeditiously as possible. For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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